

Lame Cow

[Mobility score](#) to identify lameness and assess severity (see below)

[Restrain](#) – ideally in a crush

Lift and examine the lamest leg

Trim the foot using a recognized method such as the Dutch 5 Step Trim (see below) or Dairyland trimming style. Most lameness is in the foot, and 90% of foot lameness is in the hindfeet

Foot problem

Non-foot problem

- [Sole haemorrhage /ulcer, White line disease](#)
- [Digital dermatitis](#)
- [Interdigital necrobacillosis \(Foul\)](#)
- [Toe necrosis](#)
- [Wall fissures](#)
- [Interdigital hyperplasia](#)

- If multiple cows have swollen hocks ([tarsal bursitis](#) - consider [cow comfort](#))
- Systemic antimicrobials and [NSAIDs](#). Consider joint flushing
- If multiple joints in the same cow are affected, consider joint fluid sampling for [Mycoplasma](#) culture

Hip luxation

Joint inflammation and infection

Idiopathic

[NSAIDs](#), rest, recheck

Consider euthanasia

Stifle injury
1. Patellar luxation
2. Cruciate injury/ rupture

Rest, [NSAIDs](#) +/- systemic antimicrobials (if infection)

[Cellulitis, tendinitis, tendon injury](#)

Weakness

1. [Milk fever](#)
2. Hypophosphatemia
3. White muscle disease

[Hypomagnesemia](#)

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Common disorders

Metabolic deficiencies

Ataxia

[Hypomagnesemia](#)

1. [Milk fever](#)
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3. White muscle disease

L4 – S2
Hindlimb paresis

Tibial branch

Peroneal branch

Knuckling, but lower limb reflexes present. Often able to bear weight

Dropping of the hock, no knuckling

Extended neck, recumbent, unable to sit sternally

Dog Sitting

Lack of anal tone

Forelimb paresis

C1 – C6

T3 – L3

S3 – S5

C6 – T2

L4 – S2

Spinal injury

Treatment: rest and [NSAIDs](#)/[Corticosteroids](#)

Test peripheral nerve sensation using a needle

[Sciatic](#)

Dropped hock and knuckling of the fetlock. Absent or reduced lower limb reflexes

[Femoral](#)

Non-weight bearing

Inability to adduct the hindlimb, 'wide-legged' stance or recumbent

[Obturator](#)

Ulnar (rare)

Hyperextended carpus, still weight bearing

Brachial Plexus

Radial, ulnar and musculocutaneous nerve dysfunction

Radial

Non-weight bearing, dragging forelimb, dropped elbow, flexed carpus and metacarpus

Nerve damage – secondary to trauma, calving or intramuscular injection

Common presentations

Hindlimb

Forelimb

Long bone fractures (rare)

>400kg – prognosis is poor, consider euthanasia

<400kg – prognosis is good, consider fixation (Martens et al 1998)

Palpate the limb for heat, swelling, pain

Consider use of auxiliary imaging

Thermal imaging may identify an inflamed limb or joint. Ultrasound can be used to assess joint capsules and peripheral bone fractures. X-Ray is the gold standard for assessing bony change but may not be practical

AHDB Dairy Mobility Score (adapted from Bell 2008)

- 0 – Non-lame, even weight bearing, rhythm, stride length and a flat back
- 1 – Uneven locomotion, with irregular rhythm, weight bearing, tracking or arched back. Affected limb(s) not immediately identifiable
- 2 – Uneven locomotion with a limb that is immediately identifiable
- 3 – Score 2, and unable to keep up with the rest of the herd

Modified Dutch-5-Step Trim for hindfeet (adapted from Manning et al 2016)

1. Measuring from the hard horn at the coronary band, cut the medial claw toe length to 75-90mm depending on the size of the cow. See [Foot: hoof trimming 02](#)
2. Pare the weight bearing surface down to 5-7mm at the toe, sparing the heel. See [Foot: hoof trimming 03](#)
3. Match the untrimmed lateral claw to this length, and balance the weight bearing surface across the toe and heel of both claws.
4. Model out the middle third of the sole, to reduce weight bearing over the lateral claw sole ulcer site and allow slurry clearance. See [Foot: trimming – post-trim](#)
5. Identify any lesions, and remove weight bearing from a painful claw
6. Remove loose or under-run horn and hard ridges

References

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